

Amendments to the claims:

This listing of claims replaces all prior versions and listings of claims in the application:

1-18. (Canceled)

19. (Currently amended) An isolated peptide or polypeptide according to claim 20 [1], wherein said Flt4 fragment is encoded by a polynucleotide or oligonucleotide that consists of a continuous nucleotide sequence of at least 200 nucleotides from a nucleotide sequence selected from the group consisting of: SEQ ID NO: 1 [, a nucleotide sequence complementary to SEQ ID NO: 1,] and SEQ ID NO: 3 [, and a nucleotide sequence complementary to SEQ ID NO: 3].

20. (New) An isolated peptide or polypeptide comprising the Flt4 receptor tyrosine kinase (Flt4) amino acid sequence set forth in SEQ ID NO: 2 or 4 or comprising a fragment thereof, wherein the fragment includes sufficient amino acid sequence of SEQ ID NO: 2 or 4 to generate an immune response in a nonhuman mammalian to produce antibodies that bind to Flt4 (SEQ ID NO: 2 or 4) and fail to bind to the Flt1 receptor tyrosine kinase amino acid sequence set forth in SEQ ID NO: 6.

21. (New) A purified peptide or polypeptide according to claim 20, comprising an extracellular domain (EC) fragment of SEQ ID NO: 2 or 4.

22. (New) A purified polypeptide according to claim 21, wherein the fragment includes extracellular domain amino acids 21 to 775 of SEQ ID NO: 2 or 4.

23. (New) A purified polypeptide according to claim 21, wherein the fragment includes amino acids 1 to 775 of SEQ ID NO: 2 or 4.

24. (New) A peptide comprising a deletion fragment of the polypeptide of claim 23.

25. (New) An oligonucleotide or polynucleotide comprising a nucleotide sequence that encodes the peptide or polypeptide of any one of claims 19-24.

26. (New) An oligonucleotide or polynucleotide according to claim 25, further comprising an expression control sequence operatively linked to the sequence the encodes the peptide or polypeptide.

27. (New) An expression vector comprising an expression control sequence operatively linked to the oligonucleotide or polynucleotide according to claim 25.

28. (New) An expression vector according to claim 27, wherein the expression control sequence comprises a promoter that promotes expression in a mammalian cell.

29. (New) A host cell transformed or transfected with a vector according to claim 28.

30. (New) An oligonucleotide or polynucleotide comprising a nucleotide sequence complementary to the oligonucleotide or polynucleotide of claim 25.